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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,829	10/13/2005	Lalitha Agnihotri	PHUS030086	4355

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EXAMINER

COUSO, JOSE L

ART UNIT	PAPER NUMBER
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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,829	Applicant(s) AGNIHOTRI ET AL.	
	Examiner Jose L. Couso	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/13/05</u> . | 6) <input type="checkbox"/> Other: ____. |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al. (U.S. Patent No. 7,336,890).

With regard to claim 1, Lu describes receiving a multimedia stream including at least one music video (see figure 4, element 410); segmenting the at least one music video from the multimedia stream by evaluating a plurality of content features related to the multimedia stream (see figure 4, element 450 and 240); and identifying the at least one music video (see figure 4, element 460).

As to claim 2, Lu describes further comprising the step of generating a summary of the at least one music video (see figure 4, element 460).

In regard to claim 3, Lu describes wherein the summary of the at least one music video is presented to a user based on personalized preferences (as clearly illustrated in figure 1).

With regard to claim 4, Lu describes wherein the at least one music video may be retrieved by a user based on personalized preferences (see figure 4, element 470 and refer to column 5, lines 7-37, column 6, lines 4-24 and column 18, lines 17-23).

As to claim 5, Lu describes wherein the plurality of content features are processed using a pattern recognition engine to identify the at least one music video (refer for example to column 6, lines 37-48).

In regard to claim 6, Lu describes wherein the plurality of content features are processed using a Bayesian Belief Network to identify the at least one music video (refer for example to column 12, lines 55-67).

With regard to claim 7, Lu describes wherein the plurality of content features are processed using one or more video segmentation rules to identify the at least one music video (refer for example to column 9, lines 7-34).

As to claim 8, Lu describes wherein the plurality of content features includes a face presence feature to evaluate patterns in the presentation of faces in the multimedia stream (refer for example to column 9, lines 51-62).

In regard to claim 9, Lu describes wherein the plurality of content features includes a videotext presence feature that determines when videotext appears in the multimedia stream (refer for example to column 12, lines 1-16).

With regard to claim 10, Lu describes wherein the plurality of content features includes a color histogram feature to evaluate patterns in the color content of the multimedia stream (refer for example to column 9, line 61 through column 10, line 6).

As to claim 11, Lu describes wherein the plurality of content features includes a camera cut feature to evaluate patterns in the camera cuts and movements in the multimedia stream (see figure 3, element 312).

In regard to claim 12, Lu describes wherein the plurality of content features includes an analysis of key words obtained from a transcript of the at least one music video (refer for example to column 10, lines 17-30).

With regard to claim 13, Lu describes wherein the plurality of content features includes an analysis of low level features derived directly from the multimedia stream (refer for example to column 8, lines 59-66).

As to claim 14, Lu describes wherein the low level features include one or more of a number of edges or shapes or local or global motion (refer for example to column 9, lines 50-58).

In regard to claim 15, Lu describes wherein the plurality of content features includes an audio feature (refer for example to column 10, lines 40-57).

With regard to claim 16, Lu describes wherein the audio feature evaluates a volume of the multimedia stream (refer for example to column 10, lines 10-57).

As to claim 17, Lu describes wherein the audio feature evaluates one or more of a mel frequency cepstral coefficient (MFCC), linear predictive coefficient (LPC), or variations in pitch bandwidth, volume or tone (refer to column 10, lines 59-67).

In regard to claim 18, Lu describes further comprising the step of obtaining identifying information for the at least one music video from an external source (as clearly illustrated in figure 1).

With regard to claim 19, Lu describes receiving a multimedia stream including the at least one music video (see figure 4, element 410); accessing a transcript associated

with the at least one music video (see figure 4, elements 450 and 240); and detecting the chorus based upon a repetition of words in the transcript (figure 4, element 460).

As to claim 20, Lu describes wherein the transcript is obtained from closed caption information (refer for example to column 10, lines 1-11).

In regard to claim 21, Lu describes wherein the chorus is employed for an automatic generation of a summary of the at least one music video (see figure 4, element 460).

With regard to claim 22, Lu describes further comprising the steps of detecting and clustering the repeated words (refer for example to column 12, lines 1-30).

As to claim 23, Lu describes wherein the detecting step is further based upon additional content features related to the multimedia stream (refer for example to column 9, lines 7-34).

In regard to claim 24, Lu describes further comprising the step of obtaining identifying information for the at least one music video from an external source (as clearly illustrated in figure 1).

With regard to claim 25, Lu describes a memory (see figure 4, elements 130, 140 and 150); and at least one controller (see figure 4, element 120), coupled to the memory, operative to receive a multimedia stream including at least one music video receiving (see figure 4, element 410); apply a plurality of content features related to the multimedia stream to a pattern recognition engine to segment the at least one music video from the multimedia stream (see figure 4, element 450 and 240); and identify the at least one music video identifying (see figure 4, element 460).

As to claim 26, Lu describes wherein the pattern recognition engine is a Bayesian Belief Network (refer for example to column 12, lines 55-67).

In regard to claim 27, Lu describes wherein the pattern recognition engine is a neural network (refer for example to column 6, lines 37-48).

With regard to claim 28, Lu describes wherein the pattern recognition engine employs an Auto Regressive Moving Average technique (refer for example to column 6, lines 37-48).

As to claim 29, Lu describes wherein the plurality of content features includes at least two of a face presence feature, a videotext presence feature; a color histogram feature, a camera cut feature, and an analysis of key words obtained from a transcript of the at least one music video (refer for example to column 6, lines 37-48).

In regard to claim 30, Lu describes a memory (see figure 4, elements 130, 140 and 150); and at least one controller (see figure 4, element 120), coupled to the memory, operative to receive a multimedia stream including at least one music video (see figure 4, element 410); apply a plurality of content features related to the multimedia stream to one or more video segmentation rules to segment the at least one music video from the multimedia stream (see figure 4, element 450 and 240); and identify the at least one music video (see figure 4, element 460).

With regard to claim 31, Lu describes wherein the plurality of content features includes at least two of a face presence feature, a videotext presence feature, a color histogram feature, a camera cut feature, and an analysis of key words obtained from a transcript of the at least one music video (refer to column 6, lines 37-48).

As to claim 32, Lu describes wherein the one or more video segmentation rules define a threshold for the plurality of content features to determine when a video segment has occurred (refer for example to column 6, lines 37-48).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hua et al., Foote et al., rainsford and Guenter all disclose systems similar to applicant's claimed invention.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose L. Couso whose telephone number is (571) 272-7388. The examiner can normally be reached on Monday through Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jose L. Couso/
Primary Examiner, Art Unit 2624
July 2, 2008